

In the Claims:

1. (Currently Amended) A high-capacity electronic switching system comprising:

two or more first stage switch modules to each of which one or more subscriber terminals are connected and each of which executes signal switching for signals from/to the subscriber terminals; and

a second stage switch module providing a communication path by receiving a signal outputted by one of the first stage switch modules via a first line, switching the signal, and outputting the signal to another one of the first stage switch modules via a second line, wherein:

each of the first stage switch modules is connected to another one of the first stage switch modules via a special-purpose link for setting a communication link between the first stage switch modules, said special-purpose link separate and distinct from said communication path; and

said switch system further comprising one or more central control units for controlling the first stage switch modules and the second stage switch module;

wherein the central control units include one or more first central control units for controlling the first stage switch modules and a second central control unit for controlling the second stage switch module, and control information is communicated between the central control units via a control bus; and

wherein the setting of the communication link via the special-purpose link is executed when an abnormal condition of the control bus has occurred and the control information communication between the central control units via the control bus is abnormal or impossible.

2. (Original) A high-capacity electronic switching system as claimed in claim 1, wherein every two of the first stage switch modules are connected together by a line of the special-purpose link directly.

3. (Original) A high-capacity electronic switching system as claimed in claim 1, wherein the special-purpose link connects the first stage switch modules so that communication links between every two first stage switch modules can at least be set via one or more lines of the special-purpose link.

4. (Currently Amended) A high-capacity electronic switching system as claimed in claim 1, wherein the setting of the communication link via the special-purpose link is executed when an abnormal condition of the second stage switch module has occurred and a normal communication ~~link setting~~ between two first stage switch modules via the second stage switch module is impossible.

5. – 7. (Cancelled)

8. (Currently Amended) A high-capacity electronic switching system as claimed in claim 1, wherein the setting of the communication link via the special-purpose link is executed when an abnormal condition of at least one of the first and second lines ~~the line~~ between the first stage switch module and the second stage switch module has occurred and normal communication ~~link setting~~ between the two first stage switch modules via the first and second lines ~~line~~ is impossible.

9. (Original) A high-capacity electronic switching system as claimed in claim 1, wherein the special-purpose link communicates analog signals.

10. (Original) A high-capacity electronic switching system as claimed in claim 1, wherein the special-purpose link communicates digital signals.

11. (Original) A high-capacity electronic switching system as claimed in claim 1, wherein the special-purpose link employs channel associated signaling.

12. (Original) A high-capacity electronic switching system as claimed in claim 1, wherein the special-purpose link employs common channel signaling.

13. (Currently Amended) A high-capacity electronic switching system comprising:

two or more first stage switch modules to each of which one or more subscriber terminals are connected and each of which executes signal switching for signals from/to the subscriber terminals; and

two or more second stage switch modules each of which provides communication paths by executing switching between the first stage switch modules and signal switching between the first stage switch module and a third stage switch module, wherein:

each of the first stage switch modules is connected to another one of the first stage switch modules via a special-purpose link for setting a communication link between the first stage switch modules, said communication link separate and distinct from said communication path, and

each of the second stage switch modules is connected to another one of the second stage switch modules via a special-purpose link for setting a communication link between the second stage switch modules,

said switching system including one or more central control units for controlling the switch modules, and control information is communicated between the central control units via a control bus, and

wherein the setting of the communication link via the special-purpose link is executed when an abnormal condition of the control bus has occurred and communication of the control information between the central control units via the control bus is impossible.

14. (Original) A high-capacity electronic switching system as claimed in claim 13, wherein every two of the second stage switch modules are connected together by a line of the special-purpose link directly.

15. (Original) A high-capacity electronic switching system as claimed in claim 13, wherein the special-purpose link connects the second stage switch modules so that communication links between every two second stage switch modules can at least be set via one or more lines of the special-purpose link.

16. (Original) A high-capacity electronic switching system as claimed in claim 13, wherein the setting of the communication link via the special-purpose link is executed when an abnormal condition of an upper stage switch module occurred and normal communication link setting between two switch modules via the upper stage switch module is impossible.

17. – 18. (Cancelled)

19. (Currently Amended) A high-capacity electronic switching system as claimed in claim 13, wherein the setting of the communication link via the special-purpose link is executed when an abnormal condition of a line between switch modules ~~such as disconnection~~ has occurred and normal communication link setting between two switch modules via the line is impossible.

20. (Original) A high-capacity electronic switching system as claimed in claim 13, wherein the special-purpose link communicates analog signals

21. (Original) A high-capacity electronic switching system as claimed in claim 13, wherein the special-purpose link communicates digital signals

22. (Original) A high-capacity electronic switching system as claimed in claim 13, wherein the special-purpose link employs channel associated signaling.

23. (Original) A high-capacity electronic switching system as claimed in claim 13, wherein the special-purpose link employs common channel signaling.

24. (Currently Amended) A high-capacity electronic switching method for a high-capacity electronic switching system including two or more first stage switch modules to each of which one or more subscriber terminals are connected and each of which executes signal switching for signals from/to the subscriber terminals, and a second stage switch module providing a communication path by receiving a signal outputted by one of the first stage

switch modules via a first line, switching the signal, and thereby outputting the signal to another one of the first stage switch modules via a second line, wherein:

each of the first stage switch modules is connected to another one of the first stage switch modules via a special-purpose link, and a communication link is set between the first stage switch modules via the special-purpose link, said communication link separate and distinct from said communication path,

wherein the setting of the communication link via the special-purpose link is executed when an abnormal condition of a control bus for communicating necessary control information between central control units of the switch modules has occurred and the control information communication between the central control units via the control bus is impossible.

25. (Original) A high-capacity electronic switching method as claimed in claim 24, wherein every two of the first stage switch modules are connected together by a line of the special-purpose link directly.

26. (Original) A high-capacity electronic switching method as claimed in claim 24, wherein the special-purpose link is connected so that communication links between every two first stage switch modules can at least be set via one or more lines of the special-purpose link.

27. (Currently Amended) A high-capacity electronic switching method as claimed in claim 24, wherein the setting of the communication link via the special-purpose link is executed when an abnormal condition of the second stage switch module has occurred and normal communication link setting between two first stage switch modules via the second stage switch module is impossible.

28. (Cancelled)

29. (Currently Amended) A high-capacity electronic switching method as claimed in claim 24, wherein the setting of the communication link via the special-purpose link is

executed when an abnormal condition of the first line between the first stage switch module and the second stage switch module ~~such as disconnection~~ has occurred and a normal communication link setting between two first stage switch modules via the line is impossible.

30. (Currently Amended) A high-capacity electronic switching method for a high-capacity electronic switching system including two or more first stage switch modules to each of which one or more subscriber terminals are connected and each of which provides a communication path by executing signal switching for signals from/to the subscriber terminals, and two or more second stage switch modules each of which executes signal switching between the first stage switch modules and signal switching between the first stage switch module and a third stage switch module, wherein:

each of the first stage switch modules is connected to another one of the first stage switch modules via a special-purpose link, and a communication link is set between the first stage switch modules via the special-purpose link, said communication link being separate and distinct from said communication path, and

each of the second stage switch modules is connected to another one of the second stage switch modules via a special-purpose link, and a communication link is set between the second stage switch modules via the special-purpose link,

wherein the setting of the communication link via the special-purpose link is executed when an abnormal condition of a control bus for communicating control information between central control units of the switch modules has occurred and communication of the control information between the central control units via the control bus is impossible.

31. (Original) A high-capacity electronic switching method as claimed in claim 30, wherein every two of the second stage switch modules are connected together by a line of the special-purpose link directly.

32. (Original) A high-capacity electronic switching method as claimed in claim 30, wherein the special-purpose link is connected so that communication links between every two second stage switch modules can at least be set via one or more lines of the special-purpose link.

33. (Currently Amended) A high-capacity electronic switching method as claimed in claim 30, wherein the setting of the communication link via the special-purpose link is executed when an abnormal condition of an upper stage switch module occurred and a normal communication link setting between two switch modules via the upper stage switch module is impossible.

34. (Cancelled)

35. (Currently Amended) A high-capacity electronic switching method as claimed in claim 30, wherein the setting of the communication link via the special-purpose link is executed when an abnormal condition of a line between switch modules ~~such as disconnection~~ has occurred and a normal communication link setting between two switch modules via the line is impossible.